

SECRET

A virtual tech rep system that can assist in reducing service call visits and customer complaints by readily analyzing image quality of an output image device, such as a copier or printer. The system generates a hardcopy test pattern output from the copier or printer and then scans the test pattern using either the platen of the digital copier or an external scanner to form a digital raster image. Test targets in the digital raster image are then determined using pattern recognition software and image quality analysis is then performed on the test targets based on the sensitivity of the human visual system. It is preferable that the image quality analysis is based on human vision systems rather than a direct comparison between original and printed images as many differences may go unnoticed by a human viewer whereas other types of differences may be readily noticed, even if only slight. The system optionally sends the test results and possibly part or all of the scanned test pattern to a service or diagnostic facility (remote or local) for further analysis when potential defects are identified. This process may be performed at start-up or automatically initiated after a predetermined number of operating cycles or hours of use have been attained.